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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,813	10/27/2005	Tomas Akenine-Moller	0110-051	6678
42015 7590 12/12/2007 POTOMAC PATENT GROUP PLLC P. O. BOX 270 FREDERICKSBURG, VA 22404			EXAMINER XU, KEVIN K	
			ART UNIT 2628	PAPER NUMBER
			NOTIFICATION DATE 12/12/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

tammy@ppglaw.com

# Office Action Summary

Application No.

10/539,813

Applicant(s)

AKENINE-MOLLER ET AL.

Examiner

Kevin K. Xu

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 6-11, 13, 15-21 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11, 13-16, 18-21, 23, 24, 30 and 31 is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-10, 17, 25-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see Remarks filed 9/24/07 with respect to the rejection(s) of claim(s) 1, 4, 6-11, 13, 15-21, 23-31 under Leather in view of Nelson have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. Nonetheless a new grounds of rejection is made under 35 USC § 101 in regards to claims 1, 4, 6-10, 17, 25-29. (See below)

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically it is unclear whether the "sampling pattern" of claim 29, dependent on claim 11, is directed towards the method for creating the sampling pattern or the pattern itself in claim 11. Thus, proper correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 4, 6-10, 17-18, 20-21, 23-29, 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically claims 1, 4, 6-10, 27-28 recite "a sampling pattern" which is directed to a judicial exception to 35

U.S.C. 101 because "a sampling pattern" is simply an abstract idea and/or non-functional descriptive material and thus, does not satisfy the requirement of a practical application. (see MPEP 2106.01 [R-5]) Thus, proper correction is required.

Furthermore claim 17 recites "an anti-aliased image created by a sampling pattern" which is non-statutory subject matter because an image is also simply an abstract idea and/or non-functional descriptive material and thus, does not satisfy the requirement of a practical application. In addition, claims 18 and 20 recite "an anti-aliasing system comprising a GPU" with claim 20 specifically reciting "wherein the GPU is implemented in software". Thus, claim 20 indicates that the claimed system of claim 18 may be software per se (a computer program per se) and thus, data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer (See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 and MPEP 2106.01 [R-5] Section 1) Also claims 25-26 recites "a computer program product directly loadable into an internal memory..." Again, it appears applicant has claimed a computer program product to be merely a computer program per se and thus, data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer (See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 and MPEP 2106.01 [R-5] Section 1) Lastly based on the rationale for claim 29 being rejected under 35 U.S.C. 112, second paragraph (see above), claim 29 may refer to simply the

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"sampling pattern" itself and thus, a "sampling pattern" would be non-statutory based on the same rationale as above. Thus, proper correction is required.

***Allowable Subject Matter***

Claims 11, 13, 15-16, 30 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin K. Xu whose telephone number is 571-272-7747.

The examiner can normally be reached on 8:30AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 571-272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KX

Kevin Xu

11/30/07



MARK Z. ZHANG  
SUPERVISOR, PATENT REVIEW  
TECHNICAL CENTER